BRUHATH BANGALORE MAHANAGARA PALIKE

YALAHANKA ELECTRICAL DIVISION

E MEASUREMENT BOOK

Name of work:- - Providing Energy efficient LED Street Lights, control Switches and wires around Ward No 04.

BRUHATH BANGALORE MAHANAGARA PALIKE

Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work:-Providing Energy efficient LED Street Lights, control Switches and wires around Ward No 04

Name of Contractror of nature of Agency:- Sri.VinayKumar M;M/s Vinay Enterprises

Job Code No:- 004-21-000021

Ref no and Date of commencement of work:-:-BBMP/EE/YNK.D/EPMT-5/W.O/00079/2020-21 Date 22/12/2021

Measurement Book No: 2574 **Page No:** 2574 18 to 423

Bill NO :- 1St RA Bill

Sl. No.	Description of item		Unit	Present Measurements		
				Qty	Tender Full Rate	Cost
1	Providing Rcc Pole pedstal of Size 0.5x0.5x1.6 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1;4;8base concrete,1;2;4pedestal concrete and etc coplete as per the data sheet enclosed		Nos	76.00	2700.00	205200.00
	Doddabalapur Road Signal LHS to Yamahashow Room To Chikkabhommasandra Cirle	40				
	Doddabalapur Road Signal RHS to Janajyothi Scchool to Chikkabhommasandra Cirle	36				
2	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia		Nos	8.00	1900.80	15206.40
3	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest mendments.2.5sqmm		Mtrs	95.00	28.80	2736.00
4	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.32mm dia 2mm thick		Mtrs	142.00	58.50	8307.00
5	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm		Mtrs	2728.00	135.00	368280.00

	Doddabalapur Road Signal LHS to Yamahashow Room To Chikkabhommasandra Cirle P1 To					
1	P2	38				
2	P3	38				
3	P4	38				
4	P5	38				
5	P6	36				
6	P7	38				
7	P8	37				
8	P9	39				
9	P10	28				
10	P11	38				
11	P12	37				
12	P13	44				
13	P14	33				
14	P15					
15	P16	39.5				
16	P17	28				
17	P18	34.5				
18	P19	29				
19	P20	27				
20	P21	33				
21	P22	41				
22	P23	31				
23	P24	34				
24	P25	34				
25	P26	28				
26	P27	25				
27	P28	31				
28	P29	31				
29	P30	26				
30	P31	31.5				
31	P32	28				
32	P33	27.5				
33	P34	28				
34	P35	28				
35	P36	26.5				
36	P37	33				
37	P38	27				
38	P39	27				
39	P40	24.5				
	Doddabalapur Road Signal RHS to Janajyothi Scchool to Chikkabhommasandra Cirle P41 to					
40	P42					
41	P43	37				
42	P44	45				
43	P45	36				

44	P46	30				
45	P47	50				
46	P48	34				
47	P49	35.5				
48	P50	36				
49	P51	39				
50	P52	33.5				
51	P53	42.5				
52	P54	36				
53	P55	28.5				
54	P56					
55	P57	35				
56	P58	36				
57	P59	39				
58	P60	54				
59	P61	31.5				
60	P62	32				
61	P63	32				
62	P64	34.5				
63	P65	29				
64	P66	31.5				
65	P67	33				
66	P68	35				
67	P69	31				
68	P70	31				
69	P71	30				
70	P72	38				
71	P73	37				
72	P74	35				
73	P75	35				
74	P76	36				
75	P77	38.5				
76	P78	35				
77	P79	33				
78	P80	36				
79	P81	33				
80	P82	39				
81	P83	35				
82	P84	33				
83	P85	32				
		2728				
6	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 3.5 core 35 sqmm		Mtrs	168.00	202.50	34020.00

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7	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.6 sqmm to 16 sqmm		Mtrs	2728.00	10.69	29162.32
8	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.25 sqmm to 75 sqmm		Mtrs	168.00	13.95	2343.60
	80 feet road ending, Infront of YES Bank	82				
	Next to Just Bake infront of 10th A Cross	86				
9	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary)		Mtrs	2188.00	68.40	149659.20
10	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.40mm		Mtrs	10.00	301.50	3015.00
11	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.35Sqmm		Nos	2.00	315.00	630.00
12	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia		No	2.00	2699.73	5399.46
13	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip		Mtrs	3.00	67.50	202.50
14	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)100Amps 25kA.		Nos	2.00	4077.00	8154.00

15	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	Sqcms	60000.00	0.32	19200.00
16	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40x40x6mm	Mtrs	16.00	229.50	3672.00
17	Supply and erection of 14 Feet Height Street Light Pole on suitable cement concrete foundation with 2.5 Feet height dia 95 mm cast iron decorative round pedestal as per design weighing not less than 37Kgs, the pedestal shall be fitted with Class 'C' G.I.Pipe 7 Feet height 75mm outer dia and 7 feet height top piece outer dia of 65mm fixed by measure of threading/ welding / coupling complete. (excluding foundation).	Each	8.00	12672.00	101376.00
18	LED Post Top Lantern GARDEN.Supply of LED Post Top Lantern with system ... wattage, housing & frame shall be of powder coated, die cast aluminum, diffuser with high density polyethylene IP65 EPDM Gasket. Life 50000 Hrs. @ L70 shall be conforming to IS 10322/Part 5/ Section 5 @ 230V. 5 years Warranty against any manufacturing defect working under standard electrical condition LED Post Top Lantern with 24 watts	Nos	8.00	14337.00	114696.00
19	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25mm dia 2mm thick	Mtrs	44.00	58.50	2574.00
20	1.1KV Class HR (Heat Resistant) PVC Insulated & UnSheathed Aluminium Wires Multistrand Single core Lead wires as per IS-694: 2010PVC Wire - 25 Sqmm Al Wt: 6.7 Kgs, Total Wt: 11.5Kgs for 100Mtrs	Mtrs	85.00	29.08	2471.80

22/4/22

21	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.		Nos	2.00	46350.00	92700.00
	80 feet road ending, Infront of YES Bank					
	Next to Just Bake infront of 10th A Cross					
		Total Rs				1169005.28
	GST Charges (12% on SR Electrical items) Item No 01 to 19	1073833.48				128860.02
		Total Rs				1297865.30

CERTIFICATE:

1.This is certify that the work done is saticefactorily.

2.This is certify that the bill amount calimed in this bill Has not claimed in any of the previous bills.

Junior Engineer(Elec)
Yalahanka Division

Asst.Exe.Engineer(Elec)
Yalahanka Division